

What is Claimed Is:

1 1. A spreading system for a vehicle having an electrical system, said system
2 comprising:
3 a hopper;
4 a conveyor positioned within said hopper;
5 a first electric motor interconnected to said electrical system of said vehicle;
6 a high efficiency conveyor drive system interconnected to said conveyor belt and
7 coupled to said first electric motor;
8 a second electric motor interconnected to said electrical system of said vehicle;
9 a spreader communicating with said hopper and coupled to said second electric
10 motor.

1 2. The spreading system of claim 1, wherein said high efficiency conveyor drive system
2 translates between about 90 and 95 percent of the power received from said electric motor to said
3 conveyor.

1 3. The spreading system of claim 1, wherein said conveyor drive system comprises a chain
2 and sprocket driver.

1 4. The spreading system of claim 1, wherein said conveyor drive system comprises an
2 eccentric cycloid disc speed reducer.

1 5. The spreading system of claim 1, wherein said electrical system comprises a battery.

1 6. The spreading system of claim 1, wherein said spreader is a spinner disc.

1 7. The spreading system of claim 1, wherein said conveyor is a conveyor chain.

1 8. A spreading system for a vehicle having an electrical system, said system
2 comprising:
3 a hopper;
4 a conveyor positioned within said hopper;
5 a first electric motor interconnected to said electrical system of said vehicle;
6 a high efficiency conveyor drive system comprising a chain and sprocket driver
7 interconnected to said conveyor and coupled to said first electric motor for translating between
8 about 90 and 95 percent of the power received from said electric motor to said conveyor; and
9 a second electric motor interconnected to said electrical system of said vehicle;
10 a spreader communicating with said hopper and coupled to said second electric
11 motor.

1 9. The spreading system of claim 8, wherein said spreader is a spinner disc.

1 10. The spreading system of claim 8, wherein said conveyor is a conveyor chain.